Amendments to the Claims

1. (currently amended) A method for reducing visual artifacts in reconstructed images, the method comprising:

a) ~~a)~~ determining edge energy for each pixel in the image;

b) ~~b)~~ comparing the edge energy for each pixel to a threshold, producing an edge map, wherein the threshold is selected to be the minimum of a user-defined maximum threshold and half of the maximum edge energy within a current image block;

c) ~~c)~~ using a distance transform to produce a filter map;

d) ~~d)~~ applying a filter to each pixel in the image, wherein the filter applied is dependent upon a filter map value for each pixel; and

e) ~~e)~~ producing an output value for each pixel in the image.

2. (original) The method of claim 1, wherein the edge energy is determined using a Sobel filter.

3. (currently amended) The method of claim 1, wherein the edge energy is determined ~~used~~ using a Prewitt filter.

4. (currently amended) The method of claim 1, wherein the edge energy is determined using a derivative of ~~Guassian~~ Gaussian filter.

5. (original) The method of claim 1, wherein the edge energy is determined using a normal filter.

6. (original) The method of claim 1, wherein pixels with an edge energy above the threshold are labeled as edge pixels and the corresponding value set to 1 in the edge map.

7. (canceled)

8. (currently amended) The method of claim ~~7~~ 1 wherein the user-defined maximum threshold is 184.

Docket No. 8371-122   Page 3 of 8   Application No. 09/823,027

PAGE 4/9 * RCVD AT 2/8/2005 5:48:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/1 * DNIS:8729306 * CSID:5032744622 * DURATION (mm-ss):02-58

9. (original) The method of claim 1, wherein boundary pixels in the edge map are set as edge pixels.

10. (currently amended) The method of claim 1 ~~7~~, wherein ~~the steps of~~ using a distance transform, applying a filter to each pixel in the image, and producing an output value for each pixel in the image of are not performed if the threshold is less than a predefined minimum value.

11. (original) The method of claim 1, wherein the distance transform is the minimum value of a user-defined maximum distance and a distance of a current pixel to a nearest edge in the edge map.

12. (original) The method of claim 1, wherein edge pixels in the edge map are given a filter map value of zero.

13. (currently amended) The method of claim 11, wherein the user-defined maximum distance is 3 pixels.

14. (original) The method of claim 1, wherein the filter further comprises a two-dimensional low pass filter.

15. (original) The method of claim 1, wherein the filter further comprises two one-dimensional low pass filters.

16. (original) The method of claim 1, wherein the filter map further comprises separate filter maps, one for horizontal operators and one for vertical operators.

17. (original) The method of claim 1, wherein the reconstructed image is in RGB color space.

18. (original) The method of claim 1, wherein the reconstructed image is in LAB color space.

19. (canceled)

20. (canceled)

21.   (currently amended) A facsimile machine, comprising:

a)——a receiver operable to receive an input image;

b)——a processor operable to decompress the input image, producing a decompressed image;

c)——a postprocessor operable to :

i)——determine edge energy for each pixel in the image;

ii)——compare the edge energy for each pixel to a threshold, producing an edge map, wherein the threshold is selected to be the minimum of a user-defined maximum threshold and half of the maximum edge energy within a current image block;

iii)——use a distance transform to produce a filter map;

iv)——apply a filter to each pixel in the image, wherein the filter applied is dependent upon a filter map value for each pixel; and

v)——produce an output value for each pixel in the image; and

d)——a print engine operable to print the decompressed and adaptively filtered image.

22.   (original) The method of claim 21, wherein the input image is a color image.

23.   (original) The method of claim 21, wherein the processor and the postprocessor are the same processor performing different sets of instructions.

24.   (currently amended) An article of computer-readable media including instructions that, when executed, cause the computer to result in:

a)——determineation of edge energy for each pixel in the image;

b)——compareison of the edge energy for each pixel to a threshold, producing an edge map, wherein the threshold is selected to be the minimum of a user-defined maximum threshold and half of the maximum edge energy within a current image block;

c)——use of a distance transform to produce a filter map;

d)——applyieation of a filter to each pixel in the image, wherein the filter applied is

dependent upon a filter map value for each pixel; and

e)——producetion of an output value for each pixel in the image.